

Appl. No. 09/753,218
Amdt. Dated MM/DD/YYYY
Reply to Office action of 11/9/2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) In a wireless network system comprising first and second sub-networks having respective first and second access points, and a wireless unit associated with first access point and having a current network protocol address valid for said first sub-network, a method for said wireless unit to obtain a new network protocol address valid for said second sub-network, comprising:

~~said wireless unit~~ receiving a message having information by said wireless unit, said information including a network protocol address of said second access point, from which said wireless unit can determine if said current network protocol address is valid for said second sub-network;

~~said wireless unit~~ determining by said wireless unit that said current network protocol address is not valid for said second sub-network from said information ~~by determining if it has previously stored said network protocol address and~~ either (i) determining that said current network protocol address is not valid for said second sub-network based on information associated with said previously stored network protocol address or (ii) determining that said current network protocol address is not valid for said second sub-network if said wireless unit has not previously stored said network protocol address;

~~said wireless unit~~ associating with said second access point by said wireless unit for communicating with said second sub-network;

~~said wireless unit~~ sending a request for said new network protocol address by said wireless unit to said second sub-network ~~by way of~~ via said second access point; and

~~said wireless unit~~ receiving said new network protocol address by said wireless unit from said second sub-network ~~by way of~~ via said second access point.

2. (Cancelled).

Appl. No. 09/753,218
Amdt. Dated MM/DD/YYYY
Reply to Office action of 11/9/2004

3. (Original) The method of claim 1, wherein said information comprises a subnet mask pertaining to said second sub-network.

4. (Original) The method of claim 1, further comprising said wireless unit sending a request to release said current network protocol address to said first sub-network.

5. (Cancelled).

6. (Cancelled).

7. (Cancelled).

8. (Currently Amended) The wireless unit of claim 97, wherein said information of said message further comprises a network protocol address of said second access point.

9. (Currently Amended) A The wireless unit of claim 7, wherein for communicating with a wired backbone network having first and second sub-networks by way of respective first and second access points, comprising:

a wireless transceiver to communicate with said first and second access points via a wireless medium;

a memory to communicate current network protocol address valid for said first sub-network; and

a logic circuit to receive a message from said second access point by way of said wireless receiver, said message includes information that comprises a subnet mask pertaining to said second sub-network from which said logic circuit can determine if said current network protocol address is valid for said second sub-network, said logic circuit is adapted to transmit a request for a new network protocol address valid for said second sub-network if said logic circuit either determines that said current network protocol address is not valid for said second sub-network or determines if said new network protocol address has not been previously stored in said memory.

Appl. No. 09/753,218
Amdt. Dated MM/DD/YYYY
Reply to Office action of 11/9/2004

10. (Currently Amended) The wireless unit of claim 87, wherein said logic circuit is capable of transmitting a request to release said current network protocol address.

11. (Currently Amended) The wireless unit of claim 87, wherein said logic circuit is capable of determining if said new network protocol address has been previously stored in said memory, and determining whether said new network protocol address is valid based on information stored in said memory that is associated with said previously stored new network protocol address.

12. (Cancelled).

13. (Currently Amended) An access point, comprising a logic circuit for periodically transmitting a message to ~~one or more~~ wireless units without any predetermination by the access point that ~~the~~ wireless unit has moved from a first sub-network to a different second sub-network, said message comprises information including a network protocol address and a subnet mask identifying that the access point is coupled to said second sub-network, said information being used by the wireless unit to ~~information from which said one or more wireless units can determine if a current network protocol address of the access point is valid on the said second sub-network which said access point is on.~~

14. (Currently Amended) The access point of claim 13, wherein said ~~information comprises a network protocol address for said second access point~~ message causes the wireless unit to release the current network protocol address and obtain a new network protocol address for the second sub-network.

15. (Currently Amended) The access point of claim 13, wherein said logic circuit ~~information comprises a subnet mask of said second sub-network~~ determines that said current network protocol address of the access point is invalid on said second sub-network if said

Appl. No. 09/753,218
Amdt. Dated MM/DD/YYYY
Reply to Office action of 11/9/2004

logic circuit locates said new network protocol address previously stored with said subnet mask of said second sub-network.

16. (Currently Amended) The access point of claim ~~15~~13, wherein said logic circuit information further comprises a subnet mask of said second sub-network determines that said current network protocol address of the access point is invalid on said second sub-network if said logic circuit does not locate said new network protocol address within internal memory of said logic circuit.

17. (Currently Amended) A wireless network system, comprising:
a wired backbone network comprising first and second sub-networks data-coupled together by way of a network device;
a first access point on said first sub-network; and
a second access point on said second sub-network, comprising a logic circuit for transmitting a message to one or more wireless units, said message includes information from which a wireless unit can determine if a current network protocol address assigned to said wireless unit is valid for said second sub-network, said information includes a network protocol address for said second access point and a subnet mask of said second sub-network.

18. (Previously Presented) The wireless network system of claim 17, wherein said information further comprises a Media Access Control (MAC) address of said second access point.

19. (Cancelled).

20. (Original) The wireless network system of claim 17, wherein said message further includes information which said one or more wireless units can make roaming decision based on.

Appl. No. 09/753,218
Amdt. Dated MM/DD/YYYY
Reply to Office action of 11/9/2004

21. (Cancelled).

22. (Cancelled).

23. (Cancelled).

24. (Cancelled).

25. (New) The access point of claim 13, wherein said message comprises a header and a payload including said information.